This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

Claims 1-6(Canceled).

Claim 7(Currently Amended). A nano-scale sensor comprising in combination:

(a) separate nano-strips of W and Pt having a partially overlapping portion with one another, the partially overlapping portion being selected from one of a ball-shaped portion, and a point shaped configuration;

(b) an electrical insulator onto which said partially ~~overlapped~~ overlapping portion of the nano-strips are deposited:

(c) a first output electrode connected to the W nano-strip; and,

(d) a second output electrode which is electrically separate from the first output electrode connected to the Pt nano-strip.

Claim 8(Original). The sensor of claim 7 wherein said insulator is glass.

Claim 9(Original). The sensor of claim 7 wherein at least one of said electrode includes: Al.

Claim 10(Original). The sensor of claim 7 wherein the nano-strips of W and Pt contain gallium.

Claim 11(Original). The sensor of claim 10 wherein said nano-strips are trimmed.

Claims 12-14(Canceled).

Claim 15(New). The sensor of claim 7, wherein the separate nano strips each include a thickness of approximately 50nm.

Claim 16(New). The sensor of claim 15, wherein the partially overlapping portion includes: a bi-metal sensing junction having a cross-sectional area of approximately 50 X 50 nm^2.

Claim 17(New). A nano sized sensor comprising:

a first metal nano sized strip on an electrical insulator substrate;

a second metal nano sized strip on said substrate, the second metal nano sized strip being a different metal material from the first nano sized strip, the first metal nano sized strip and the second metal nano sized strip each include a thickness of approximately 50nm; and

a bi-metal sensing junction having a ball-shaped portion that is formed between a portion where the first metal nano sized strip meets a portion of the second metal nano sized strip, the bi-metal sensing junction having a cross-sectional area of approximately 50 X 50 nm^2.

Claim 18(New). The sensor of claim 17, wherein one of the first metal nano sized strip and the second nano metal sized strip is W(tungsten) and another of the first metal nano sized strip and the second nano sized strip is Pt(platinum).

Claim 19(New). The sensor of claim 17, wherein the sensor includes:

a thermo couple for sensing temperature at the bi-metal junction.

Claim 20(New). A nano sized sensor comprising:

a first metal nano sized strip on an electrical insulator substrate;

a second metal nano sized strip on said substrate, the second metal nano sized strip of a different metal material from the first nano sized strip, the first metal nano sized strip and the second metal nano sized strip each include a thickness of approximately 50nm;

a bi-metal sensing junction having a point shaped configuration portion formed between a portion between the first metal nano sized strip and the second metal nano

sized strip, the bi-metal sensing junction includes a cross-sectional area of approximately 50 X 50 nm^2.

Claim 21(New). The sensor of claim 20, wherein one of the first metal nano sized strip and the second nano metal sized strip is W(tungsten) and another of the first metal nano sized strip and the second nano sized strip is Pt(platinum).

Claim 22(New). The sensor of claim 20, wherein the sensor includes:

a thermo couple for sensing temperature at the bi-metal junction.